



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,393	07/16/2003	Igor Giterman	02570-P0017A	9545

24126 7590 03/18/2005

ST. ONGE STEWARD JOHNSTON & REENS, LLC
986 BEDFORD STREET
STAMFORD, CT 06905-5619

EXAMINER

MILLER, TAKISHA S

ART UNIT	PAPER NUMBER
----------	--------------

2855

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,393	Applicant(s) GITERMAN, IGOR	
	Examiner Takisha Miller	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED Final ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-12, 14-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muehlhauser et al. (6,070,475)(hereinafter Muehlhauser) in view of McCormack (4,718,273).

- a. With respect to claims 1, 10 and 16, Muehlhauser teaches an air data pressure probe (80) and method comprising a body section (84) having an end/attachable and detachable head (94), a central conduit (90) extending longitudinally through said body section (84) toward the head portion (94) and an inlet port (98) located in the head portion (94) and communicating with said central conduit (90) having an air inlet end (118) and an air outlet end (124), said inlet port (98) having a longitudinal cross section, the diameter of the cross section of the air outlet end (124) being smaller than the diameter of the circular cross section of the air inlet end (118)(Fig.3)(Col. 5, line 55 – Col. 6, line 3) and said body (84) being substantially cylindrical and having a diameter that is not less than a diameter of the end (94). Muehlhauser lacks teaching the end

portion (94) explicitly formed as a hemispherical portion. McCormack teaches a head portion (22) formed as a hemispherical portion (Figs. 2)(Col.3, lines 58-59). Since Muehlhauser teaches a head portion that is both attachable and detachable to the probe body, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Muehlhauser to include a hemispherical head portion as taught by McCormack to utilize various rotationally symmetrically shaped probe heads in order to keep fluctuations in the flow field to a minimum (see McCormack; Col. 4, lines 53-56).

b. With respect to claims 2, 11 and 17, Muehlhauser teaches an air data pressure probe (80) and method wherein said inlet port (98) is formed as a frusto-conical section (Fig.3).

c. With respect to claims 3, 12 and 18, Muehlhauser teaches an air data pressure probe (80) and method wherein said inlet port (98) further comprises convex side portions extending from the air inlet end (118) to the air outlet end (124)(Fig.3).

d. With respect to claims 5, 10 and 20, Muehlhauser teaches an air data pressure probe (80) and method further comprising a heater (108/110) for de-icing the air data pressure probe (80)(Fig.3)(Col. 1, lines 33-36).

e. With respect to claims 6, 10 and 21, Muehlhauser teaches an air data pressure probe (80) and method wherein said heater (108) is located in the hemispherical tip portion/head portion (94)(Fig.3).

f. With respect to claim 7, Muehlhauser teaches an air data pressure probe (80) wherein said heater (108/110) surrounds said inlet port (98)(Fig.3).

Art Unit: 2855

g. With respect to claims 8, 9, 14, 15 and 21, Muehlhauser teaches an air data pressure probe (80) and method further comprising at least two conduits each conduit being located on opposite sides of the central conduit (90) and each conduit having a respective inlet port (Col. 7, lines 16-28).

4. Claims 4, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muehlhauser et al. (6,070,475) in view of McCormack (4,718,273) as applied to claims 1,10 and 16 above, and further in view of Rossow (5,233,865). Muehlhauser in view of Kohler teach an air data pressure probe (80) and method comprising an inlet port (98) but lacks teaching the inlet port having concave sides. Rossow teaches concave inlet ports/orifices (50). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Muehlhauser in view of Kohler to include a concave inlet port as taught by Rossow in order to utilize various inlet port shapes which are readily known in the art (see Rossow, Col. 17, lines 40-42 and lines 56-57).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


Art Unit: 2855

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Takisha Miller whose telephone number is (571) 272-2184. The examiner can normally be reached on Monday - Friday (7:00 am - 3:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800